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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,445	12/08/2003	Robert Walker	2003P54211US/I331.125.101	2272

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EXAMINER

TAN, VIBOL

ART UNIT	PAPER NUMBER
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2819

DATE MAILED: 08/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary**Application No.**

10/730,445

Applicant(s)

WALKER, ROBERT

Examiner

Vibol Tan

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-18, 20-22 and 24-31 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 1-13, 15-18, 20-22, 26, 27 and 31 is/are allowed.
 6) ☒ Claim(s) 24, 25 and 28-30 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's amendment filed on 8/10/2005 has been fully considered. However, in view of further consideration, a new rejection is set forth below; therefore, the finality of the final rejection mailed 06/06/2005 is withdrawn.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 24, 28 and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recitation of "masking a clock signal" was not described in the specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 17, the data rate data signal is a 3.2 GHz double data rate signal.

Shouldn't it be 3.2 GBits because data rate generally deals with bit rate (bit = half of a

clock cycle) while clock signal deals with cycle (Hz). It is noted the specification in page 4, uses the same unit of GHz for both clock and data rate. Clarification is necessary.

Claims 18 is rejected in the same manner as claim 17 and further the data rate of 1.6 GHz not found in the specification.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 24, 25, 28, 29 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Choi (US 2004/0207544).

In claim 24, Choi teaches all claimed features in Figs. 1-4, a chip to chip interface comprising means (210) for providing a first signal (TX_D1') in response to a change in even data (RX_D1_even) in a double rate data stream; means (212) for providing a second signal (TX_D2') in response to a change in odd data (RX_D2_odd) in a double rate data stream; means for receiving (410) the first signal and toggling (clocking RClk1, RClk1b) a first bit (RX_D1) in response to the first signal; means (420) for receiving the second signal and toggling (clocking RClk2, RClk2b) a second bit (RX-D2) in response to the second wherein the means for providing the first signal comprises means for providing the first signal.

In claim 25, Choi teaches all claimed features in Figs. 1-4, a chip to chip interface comprising means (210) for providing a first signal (TX_D1') in response to a change in even data (RX_D1_even) in a double rate data stream; means (212) for providing a second signal (TX_D2') in response to a change in odd data (RX_D2_odd) in a double rate data stream; means for receiving (410) the first signal and toggling (clocking RClk1, RClk1b) a first bit (RX_D1) in response to the first signal; means (420) for receiving the second signal and toggling (clocking RClk2, RClk2b) a second bit (RX-D2) in response to the second wherein the means for receiving the first signal (410) comprises means for latching (414e) the first bit with a clock signal (RClk1).


In claims 28-30, Choi teaches all claimed features in Figs. 1-4, a method for communicating data between chips comprising: generating a first signal (TX_D1') in a first chip (202) in response to a change in first data at positive edges of a clock signal (TClk1); generating a second signal (TX_D2') in the first chip in response to a change in second data at negative edges of the clock signal (TClk2); passing (via 206) the first signal and the second signal from the first chip to a second chip (404); toggling a first bit (RX_D1) in the second chip in response to the first signal; and toggling a second bit (RX_D2) in the second chip in response to the second signal; and setting the first bit and the second bit to initial values (inherent).

7. Claims 1-13, 15-18, 20-22, 26, 27 and 31 appear to comprise allowable subject matters.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vibol Tan whose telephone number is (571) 272-1811. The examiner can normally be reached on Monday-Friday (7:00 AM-4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


VIBOL TAN
PRIMARY EXAMINER